## TABLE 1.a. ESTIMATED ONE-TIME BURDEN AND COST TO INDUSTRY TO IMPLEMENT REPORTING AND RECORDKEEPING REQUIREMENTS

				(C)		(E)	(F)
		(A)	(B)	Person-hours		Technical	Management
		Person-	Number of	per respondent	(D)	person-hours	person-hours
		hours per	occurrences	per year	Respondents	per year	per year
Burder	n item	occurrence	per year	$(C = A \times B)$	per yeara	(E = C x D)	$(F = E \times 0.05)$
1. Ap	pplications	N/A					
2. St	rveys and studies	N/A					
3. Re	eporting requirements (nonpathological HMIWI)						
A.	Read instructions	1	1	1	1	1	0.05
В.	Required activities						
	Perf. spec. tests (certif.) for CMS	13c	1	13	1	13	0.65
	Repeat perf. spec. tests (certif.) for CMS	13c	1	13	0.2d	3	0.15
	Development of operating information	160e	1	160	1	160	8.00
C.	Create information	Incl. in 3B					
D.	Gather existing information	Incl. in 3B					
E.	Write report						
	Notification of intent to construct	2	1	2	1	2	0.10
	Notification of anticipated commencement	2	1	2	1	2	0.10
	of construction						
	Notification of actual startup	2	1	2	1	2	0.10
	Notification of type(s) of waste	2	1	2	1	4	0.20
	to be combusted						
	Notification of HMIWI capacity	2	1	2	1	2	0.10
	Notification of initial performance	2	1	2	1	2	0.10
	test (PM, CO, dioxins/furans, HCl, Cd, Pb,						
	Hg, stack opacity, fugitive emissions)						
	Notification of initial CMS demonstration	2	1	2	1	2	0.10

			1			
Initial report for the site selection analysis	460f	1	460	1	460	23.00
Waste reduction plan	160g	1	160	1	160	8.00
Report of initial performance test	40h	1	40	1	40	2.00
(PM, CO, dioxins/furans, HCl, Cd, Pb, Hg,						
stack opacity, fugitive emissions)						
Report of initial CMS demonstration	Incl. in 3B					
4. Reporting requirements (pathological and cofired						
combustors)						
A. Read instructions	N/A					
B. Required activities	N/A					
C. Create information	N/A					
D. Gather existing information	N/A					
E. Write report						
Notification of relative amounts of hospital,	2	1	2	4	8	0.40
medical/infectious, and other waste charged						
Notification of exemption claim	2	1	2	4	8	0.40
5. Recordkeeping requirements (nonpathological HMIWI)						
A. Read instructions	Incl. in 3A					
B. Plan activities	N/A					
C. Implement activities	N/A					
D. Develop record system	N/A					
E. Time to enter information						
Documentation produced as a	Incl. in 3E					
result of siting requirements						
Records of operators completing operator	2	2i	4	1	4	0.20
training requirements						<del></del>
Records of operators that have been qualified	2	2i	4	1	4	0.20
as HMIWI operators						
Records of initial performance test	Incl. in 3E					
F. Time to train personnel	N/A					
G. Time for audits	N/A					
AVERAGE ONE-TIME BURDEN AND COST (SALARY) NATION	WIDENEXT 3 Y	EARSj:	·	·	877	44

- a A total of 1 new source to be equipped with wet/dry scrubbers is projected each year after renewal. An additional 4 sources (pathological and cofired combustors) are also projected each year, but will be considered exempt. Assumes one affected facility per respondent.
- b Costs are based on the following hourly rates: technical at \$55.34, management at \$78.54, and clerical at \$35.64. The composite hourly labor rate is 62.83/hr ( $55.34 + 0.05 \times 78.54 + 0.1 \times 35.64 = 62.83$ ).
- c Person-hours per occurrence are based on the performance specification costs to certify CMS (\$500) divided by the composite hourly labor rate.
- d Assumes 20 percent of the initial CMS demonstrations must be repeated due to failure of the first CMS demonstration.
- e Assumes 160 hrs to develop the operating information.
- f Assumes 460 hours to develop the site selection analysis.
- g Assumes 160 hours to develop the waste reduction plan.
- h Assumes 40 hours to review report of initial performance test.
- i Assumes 2 operators per facility. Also assumes there is no operator turnover at the affected facilities.
- j The average one-time burden and cost in the 3 years after renewal for the 1 new source projected each year is equal to the person-hours added down each column for technical, management, and clerical and the sum of the cost column. The sums are equal to the one-time burden and cost in the second year after renewal.
- k Responses per year is based on multiplying the number of occurances per year by the number of respondents per year.

	1	
(G)		
Clerical		
person-hours	(H)	<b>(I)</b>
per year	Cost,	Responses
$(G = E \times 0.1)$	\$b	(I=B x D)
0.100	63	1
1.300	817	1
0.300	188	0.2
16.000	10,053	1
0.200	126	1
0.200	126	1
0.200	126	1
0.400	251	1
0.200	126	1
0.200	126	1
0.200	126	1
0.200	120	<u>'</u>

46.000	28,902	1
16.000	10,053	1
4.000	2,513	1
0.800	503	4
0.800	503	4
0.400	054	
0.400	251	2
0.400	251	2
0.400	∠31	
88	55,103	25.2k
00	JJ, 1UJ	2U.ZN

TABLE 1. b. ESTIMATED RECURRENT BURDEN AND COST TO INDUSTRY TO IMPLEMENT REPORTING AND RECORDKEEPING REQUIREMENTS

					(C)		(E)
			(A)	(B)	Person-hours		Technical
			Person-	Number of	per respondent	(D)	person-hours
			hours per	occurrences	per year	Respondents	per year
Bui	den	item	occurrence	per year	(C = A x B)	per yeara	(E = C x D)
1.	App	lications	N/A				
2.	Sur	veys and studies	N/A				
3.	Rep	porting requirements (nonpathological HMIWI)					
	Α.	Read instructions	N/A				
	В.	Required activities					
		Annual update of operating information	20c	1	20	5d	80
		Review of operating information with each operator	8e	2f	16	6g	144
		with each operator					
	C.	Create information	Incl. in 3B				
	D.	Gather existing information	Incl. in 3B				
	E.	Write report					
		Annual Report					
		CMS operating paramters (parameters	26h	1	26	5d	130
		established during initial test, hightest					
		maximum and lowest minimum parameters)					
		Emissions/parameters exceedances and	48i	1	48	1dj	48
		periods for which data on emissions/					·
		parameters were not obtained					
		Results of performance tests conducted	40k	1	40	5d	160
		during the year					
		Report of no exceedances	24i	1	24	4dj	96
		Semiannual report of emissions/parameter	48i	11	48	1.80gj	86.4

		exceedances and periods for which data on					
		emissions/parameters were not obtained					
4.	Rep	porting requirements (nonpathological HMWI)					
	A.	Read instructions	N/A				
	B.	Plan activities	N/A				
	C.	Implement activities	N/A				
	D.	Develop record system	N/A				
	E.	Time to enter information					
		Records of startup, shutdown, or	2	52	78	6g	702
		malfunction					
		Records of persons completing review	2	2	4	6g	36
		of operating information					
		Records of annual testing of	Incl. in 3E.				
		fugitive emissions					
		Records of process and control device	1.5	52	78	6g	702
		operating parameters					
		Records of CMS operation and maintenance	0.2g	272	54.4	6m	489.6
		Records of emissions/parameters	1.5	52	78	6g	702
		exceedances and periods for which data on					
		emissions/parameters were not obtained					
		Records of annual and any subsequent	Incl. In 3E.				
		compliance tests					
	F.	Time to train personnel	40n	1	40	6g	360
	G.	Time for audits	N/A				
5.	Red	cordkeeping requirements (pathological and					
	cofi	red combustors					
	A.	Read instructions	N/A				
	B.	Plan activities	N/A				
	C.	Implement activities	N/A				
	D.	Develop record system	N/A				
	E.	Time to enter information					
		Quarterly records of hospital, medical/	2	4	8	4	32
		infectious, and other waste charged					

F. Time to train personnel	N/A				
G. Time for audits	N/A				
AVERAGE RECURRENT BURDEN AND COST (SALARY) NATIONWIDENEXT 3 YEARSo:					

- a A total of 4 existing sources and 1 new source per year (during the next three years are to be equipped with wet/dry scrubbers). An additional 4 sources (path combustors) are also projected each year, but will be considered exempt. Assumes one affected facility per respondent.
- b Costs are based on the following hourly rates: technical at \$55.34, management at \$78.54, and clerical at \$35.64. The composite hourly labor rate is \$62.83/l c Assumes 20 hours to update the operating information each year.
- d Because this activity will not be performed during the first year, the average annual number of HMIW with recurrent burden in the next 3 years is 5 (4+5+6)/3 for all HMIWI subject to the standards.
- e Assumes 8 hours review the operating information with each operator.
- f Assumes 2 operators per facility. Also assumes there is no operator turnover at the affected facilities.
- g The average annual number of HMIWI with recurrent burden in the 3 years after renewal is 6 ((5+6+7)/3 = 6) for all HMWI subject to the standards.
- h Person-hours per occurrence are based on the reporting and recordkeeping costs for CMS (\$1,000) divided by the composite hourly rate.
- i Assumes 16 and 8 person-hours per report per affected facility per pollutant to report monitoring exceedances and no excess emissions, respectively. Becaus monitoring requirements focus primarily on three pollutants (PM, CO, and HCl), assume three pollutants.
- j Assumes 20 percent of respondents report monitoring exceedances and 80 percent report no excess emissions, based on annual number of HMIWI with recurr 3 years after renewal.
- k Assumes 40 hours to review report of annual compliance test.
- I Because the semiannual report coincides once each year with the annual report and both reports include information on exceedances and periods for which dat the frequency of the semiannual report is shown in the table as only once per year to avoid double-counting.
- m Person-hours per occurrence are based on the recordkeeping cost for day-to-day operation and maintenance (O&M) of CMS divided by the composite hourly leadys per year. The O&M recordkeeping costs are \$1,963 for large HMIWI equipped with wet/dry scrubbers (an average of 4 sources operating 272 d/yr).
- n Based on the time per year to train one person to perform the Method 9 and Method 22 opacity tests. The labor requirements to train the personnel were estin
- o The average recurrent burden and cost in the 3 years after renewal for the average 2 sources with recurrent burden are equal to the person-hours added down e technical, management, and clerical and the sum of the cost column. The sums are equal to the recurrent burden and cost in the second year after renewal.
- p The annual reporting and recordkeeping hour burden is 4541 (1009+4333-801.3). Based on the table 1a person-hours per year (1009=877+44+88) and the table per year (4541=3,768+188+377) minus the 15% of responses collected electronically (801.3). See part 13.c. of OMB Form 83I.
- q Responses per year is based on multiplying the number of occurances per year by the number of respondents per year.

(F)	(G)		
Management	Clerical		
person-hours	person-hours	(H)	<b>(I)</b>
per year	per year	Costb \$	Responses
$(F = E \times 0.05)$	$(G = E \times 0.1)$		(I= B x D)
4.00	8.000	5,026	5
7.20	14.400	9,048	0
6.50	13.000	8,168	5
2.40	4.800	3,016	1
8.0	16.000	10,053	5
4.80	9.600	6,032	4
4.32	8.640	5,429	1.8

35.10	70.200	44,107	
1.80	3.600	2,262	12
35.10	70.200	44,107	312
24.48	48.960	30,762	1632
35.10	70.200	44,107	312
18.00	36.000	22,619	6
1.60	3.200	0	16

188	377p	212,117	2323.8q

nological and cofired

/hr  $(55.34 + 0.05 \times 78.54 + 0.1 \times 35.64 = 62.83)$ .

3 = 5)

se testing and

rent burden in the

ta were not obtained,

labor rate and the operating

mated to be 8 hr/d for 5 d/yr.

each column for

le 1b person-hours

TABLE 2. ANNUAL BURDEN AND COST FOR THE FEDERAL GOVERNMENT TO IMPLEMENT REPORTING AND RECORDKEEPING REQUIREMENTS

			(C)		(E)
		(B)	EPA-hours		Technical
	(A)	Number of	per facility	(D)	person-hours
	EPA-hours	occurrences	per year	Facilities	per year
Activity	per occurrence	per year	$(C = A \times B)$	per yeara	$(E = C \times D)$
Attend initial performance test	32	1	32	0.08c	2.56
Repeat performance test					
A. Retesting preparation	12	1	12	0.2d	2.40
B. Attend retesting	32	1	32	0.02e	0.64
3. Litigation	2,080	1	2,080	0.01f	20.8
4. Excess emissionsenforcement	32	1	32	0.01g	0.32
activities					
5. Report review					
Review notification of intent to construct	2	1	2	1	2
Review notification of anticipated	2	1	2	1	2
commencement of construction					
Review notification of actual startup	2	1	2	1	2
Review notification of type(s) of waste	2	1	2	1	2
to be combusted					
Review notification of HMIWI capacity	2	1	2	1	2
Review notification of initial performance test	8	1	8	1	8
Review notification of initial CMS	5	1	5	1	5
demonstration					
Review notification of relative amounts of hospital,	2	1	2	4	8
medical/infectious, and other waste charged					
for pathological and cofired combustors					
Review notification of exemption claim for	2	1	2	4	8
pathological and cofired combustors					
Review study addressing siting requirements	24	1	24	1	24
Review waste reduction plan	8	1	8	1	8

Review report of initial performance test	42h	1	42	1	42
Review report of initial CMS demonstration	64i	1	64	1	64
Review annual report					
CMS operating parameters (parameters	4	1	4	5 <u>j</u>	20
established during initial test, highest					
maximum and lowest minimum parameters)					
Emissions/parameter exceedances	8	1	8	1k	8
and periods for which data on emissions/					
parameters were not obtained					
Results of performance tests conducted	18	1	18	5 <u>j</u>	90
during the year					
Report of no exceedances	2	1	2	41	8
Review semiannual report of emissions/parameter	8	1	8	1k,m	8
exceedances and periods for which data on					
emissions/parameters were not obtained					
AVERAGE TOTAL BURDEN AND COST (SALARY) NATIONWIDENEXT 3 YEARSo:					338

AVERAGE TRAVEL EXPENSESp = [(1 person x 0.11 facilities/yr x 4 d/facility x \$50/d) + (\$500/round trip x 0.11 round trips/yr)] =

AVERAGE TOTAL COST = ANNUAL AVERAGE COST + ANNUAL AVERAGE TRAVEL EXPENSES =

a A total of 1 new source to be equipped with wet/dry scrubbers is projected each year from the date of renewal. An additional 4 sources (pathological and cc combustors) are also projected each year, but will be considered exempt. Assumes one affected facility per respondent.

b Costs are based on the following hourly rates: technical at \$36.98, management at \$49.82, and clerical at \$20. The composite hourly labor rate is 41.47/hr  $(36.98 + 0.05 \times 49.82 + 0.1 \times 20.00 = 41.47)$ .

- c Each year, a total of 1 HMIWI perform an initial performance test. Assume EPA personnel attend 8 percent of these tests.
- d Of the 20 percent that are assumed to fail the initial performance test, assume all repeat the performance test.
- e Assume 10 percent of retests are attended by EPA personnel.
- f Assume 1 percent of the affected facilities will be involved in litigation.
- g Assume 10 percent of the affected facilities are required to retest as a result of excess emissions, and that EPA personnel attend 10 percent of these tests h Assumes 6 person-hours per report per pollutant. For initial tests, there are seven pollutants (PM, CO, CDD/CDF, HCl, metals, stack opacity, and fugitive there are three pollutants (PM, CO, and HCl).
- i Assumes 8 person-hours per report per CMS. There are eight CMS included in this rule (temperature, gas flow, charge weight, pH, liquid flow, pressure drop j Because this activity will not be performed during the first year, the average annual number of HMIWI with recurrent burden in the 3 years after renewal is 5 (in the Assumes 20 percent of the affected facilities with recurrent burden report monitoring exceedances.

I Assumes 80 percent of the affected facilities with recurrent burden report no excess emissions.

- m The average annual number of HMIWI with recurrent burden in the 3 years after renewal is 6 ((5 + 6 + 7)/3 = 6) for all HMIWI subject to the standards.
- n This is the total burden and cost for EPA in the first year after renewal.
- o The annual average burden and cost for all activities in the 3 years after renewal for EPA are equal to the person-hours added down each column for technic
- and the sum of the cost column. The sums are equal to the annual burden and cost in the second year after renewal.
- p Tests attended = 0.08 (initial tests) + 0.02 (repeat tests) + 0.01 (excess emissions enforcement tests) = 0.11 tests.

(F)	(G)		
Management	Clerical		
person-hours	person-hours	(H)	
per year	per year	Cost,	
$(F = E \times 0.05)$	$(G = E \times 0.1)$	\$b	
0.13	0.26	106	
0.12	0.24	100	
0.032	0.06	27	
1.0	2.1	863	
0.016	0.032	13	
0.10	0.20	83	
0.10	0.20	83	
0.10	0.20	83	
0.10	0.20	83	
0.10	0.20	83	
0.40	0.8	332	
0.25	0.5	207	
0.4	0.8	332	
0.40	0.8	332	
1.20	2.4	995	
0.40	0.8	332	
•			

1		[		
2.10	4.2	1,742		
3.20	6.4	2,654		
1.00	2.00	829		
0.40	0.80	332		
4.50	9.0	3,732		
	0.0	5,: 52		
0.40	0.80	332		
0.40	0.80	332		
17	34	14,006		
77				
14,083				

ofired

s. emissions). For annual tests,

p, carbon flow, and lime flow). ((4 + 5 + 6)/3 = 5).

